

Claims

I claim:

- 1. An automatic turn signal indicator control device which contains an integrated voltage supply regulator, said device automatically cancels the turn signal indicator and provides multiple turn signal indicator control functions for use on a motorcycle or other vehicle.**
- 2. An adjustable position sensor mounting system for use with said device or other devices that depend on detection of angular deviation for operation.**
- 3. Said device as described in Claim 1 is adaptable to any vehicle which relies on banking or leaning to complete a turning maneuver.**
- 4. Said device as described in Claim 1 performs an initial power up sequence to verify that the vehicle's turn signal control system is functioning properly.**
- 5. Said device as described in Claim 1 is operated by a manual turn signal indicator activation switch or switches which may be of single pole or multiple pole design.**
- 6. Said device as described in Claim 1 provides multiple turn signal indicator control functions by:**
 - ◊ automatic deactivation of the vehicle's turn signal indicator;**
 - ◊ a continuous indicator function for use as in being stopped at a traffic control signal or moving slowly in heavy traffic;**
 - ◊ a time controlled indicator function for use as in a passing maneuver, or for merging into interstate or divided highway traffic, or for changing lanes on an interstate or divided highway;**
 - ◊ a continuous emergency four-way flasher function to indicate distress or to increase the visibility of the vehicle during adverse weather conditions;**
 - ◊ a time controlled emergency four-way flasher function to indicate distress or to increase the visibility of the vehicle during adverse weather conditions;**
 - ◊ manual deactivation, if desired, in the event the vehicle operator decides not to execute a previously anticipated turning maneuver;**
 - ◊ conversion of the continuous functions above into the timed functions;**
 - ◊ conversion of the timed functions above into the continuous functions.**

7. Said device as described in Claim 6 provides multiple turn signal indicator control functions through sequential operation of the vehicle's turn signal indicator activation switch or switches.
8. Said device as described in Claim 6 contains:
 - ◊ a voltage regulator configured to provide a constant unerring voltage supply to the control circuitry;
 - ◊ the control circuitry consisting of capacitors, resistors, diodes and/or any logic, memory or other signal processing device or devices necessary to provide the required control logic to the controller;
 - ◊ a controller or signal processing device such as a linear IC, PROM, microprocessor or other signal processing device or combination of these devices thereof;
 - ◊ a means of directing and controlling the output of the controller to the vehicle's turn signal indicator circuitry said means consisting of transistors and/or electromechanical or solid state relays or other silicon controlled devices or any combination of these devices thereof;all of which is mounted to a printed circuit board individually or as a single hybrid IC or any combination thereof through conventional or surface mount technology.
9. Said adjustable position sensor mounting system of Claim 2 consists of a base constructed of spring steel or other material type capable of providing spring like resilience and an adjusting device to provide a means of adjusting said base.
10. The adjusting device of Claim 9 is any device that when operated allows or causes change in the mounting base from its at rest position.
11. A position sensor is attached to said mounting base of Claim 9.
12. Said position sensor of Claim 11 are a liquid or heavy metal filled switch, accelerometer, silicon controlled gyroscope or any device or combination of devices thereof capable of detecting angular deviation.